Application No.: 10/587,514
Reply to Office Action of January 22, 2009

Docket No.: 4035-0182PUS1

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-18 are now present in the application. Claims 1 and 8 are independent.

Reconsideration of this application is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 1, 5-8 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent Application Publication 2002/0010573 to Wakita et al. ("Wakita")in view of U.S. patent Application Publication 2005/0171757 to Appelby. Claims 2 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakita in view of Appelby and further in view of U.S. Patent 5,321,607 to Fukumochi. Claims 4 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakita in view of Appelby and further in view of Tolin et al. ("Tolin"), U.S. Patent No. 5,490,061. Claims 3, 10 and 15-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakita in view of Appelby, Fukumochi and U.S. patent 5,608,623 to Sata et al. ("Sata"). These rejections are respectfully traversed.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole, "not just a few features of the claimed invention. Under 35 U.S.C. §103, " [a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter *as a whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under §103 is whether the claimed invention *as a whole* would have been obvious to a person of ordinary skill in the art at the time the invention

was made. *See In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. *See Medtronic, Inc. v. Cardiac Pacemakers. Inc.*, 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *See Uniroyal Inc. v. F-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v Delta Resins & Refactories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all

the claim limitations must be suggested or taught by the prior art. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. *See In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." *See C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." *See In re Dembiczak*, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent. Only when a *prima facie* case is made, the burden shifts to the applicant to come forward to rebut such a case.

Independent claim 1 recites a combination of features including an input step in which the one or more keywords in the source language are input via an input means without inputting a full text sentence in the source language, the one or more keywords being a segment of the full

text sentence in the source language; a sentence pair extraction step in which a sentence pair extraction means extracts one or more sentence pairs each including at least one of the keywords from a parallel corpus database including partial correspondence information indicating correspondence between a word/phrase in the source language and a word/phrase in the target language in each sentence pair; a keyword-related phrase storage step in which a target-language keyword-related phrase corresponding to each source-language keyword-related phrase is detected from the partial correspondence information of each sentence pair and stored in the form of a keyword-related phrase table in a storage means; a text sentence candidate generation step in which a text candidate generation means assumes dependency relationships among keyword-related phrases in the target language described in the keyword-related phrase table and generates one or more target-language text sentence candidates; and an output step in which at least one text sentence candidate is output from an output means corresponding to the full text sentence in the source language.

Independent claim 8 recites a combination of features including input apparatus for inputting the one or more keywords in the source language without inputting a full text sentence in the source language, the one or more keywords being a segment of the full text sentence in the source language; a parallel corpus database including partial correspondence information indicating correspondence between a word/phrase in the source language and a word/phrase in the target language in each sentence pair; a sentence pair extraction means for extracting one or more sentence pairs each including at least one of the keywords from the parallel corpus database; a keyword-related phrase storage means for detecting a target-language keyword-related phrase corresponding to each source-language keyword-related phrase from the partial

correspondence information of each sentence pair and storing the detected target-language keyword-related phrase in the form of a keyword-related phrase table; a text candidate generation means that assumes dependency relationships among keyword-related phrases in the target language described in the keyword-related phrase table and generates one or more target-language text sentence candidates; and an output means for outputting at least one text sentence candidate corresponding to the full text sentence in the source language.

Applicants respectfully submit that Wakita differs substantially from the claimed invention in a number of ways.

Firstly, Wakita inputs entire sentences. In this regard, reference is made to paragraph [0108] of Wakita, which states that voice recognizing means 4 recognizes the voice input as an original languages sentence. This differs fundamentally from Applicants' claimed invention, which positively recites "an input step in which the one or more keywords in the source language are input via an input means without inputting a full sentence in the source language . . ."

Secondly, Wakita's sentence pair extraction step, which appears to be a word string candidate generation by voice recognition means 4, is not disclosed as including partial correspondence information indicating correspondence between a word/phrase in the source language and a word/phrase in the target language in each sentence pair, as claimed.

Thirdly, Wakita does not appear to disclose a keyword-related storage step, as claimed. The Office Action asserts that this step is disclosed in paragraphs [1026-8] – which appears to be a typo and to mean paragraphs [126-8]. Applicants respectfully disagree with this assertion, because Wakita does not disclose storing in the form of a keyword related phrase table, a target-language keyword-related phrase corresponding to each source-language keyword-related

detected phrase. Instead, it appears that Wakita outputs a target language expression pattern - see paragraph [0129]. *The Office Action admits that this claimed feature is not found in Wakita.*

Fourthly, Wakita's text sentence candidate generation feature does not involve the claimed keyword-related phrases in the target language in the admittedly lacking keyword-related phrase table.

In an attempt to remedy some of the aforementioned deficiencies of Wakita, the Office Action turns to Appleby, shares a number of the same deficiencies that Wakita does, including inputting a full sentence, and the failure to disclose a sentence pair extraction step in which a sentence pair extraction means extracts one or more sentence pairs each including at least one of the keywords from a parallel corpus database including partial correspondence information indicating correspondence between a word/phrase in the source language and a word/phrase in the target language in each sentence pair.

As Applicants explained in the previous Amendment, in Appleby, the *full text sentence* in the source language to be translated *has to be selected/inputted* at the outset in order for Appleby's translation machine to translate, not just *a segment* of the full text sentence in the source language. In particular, in Appleby's system, it is essential to input a first sentence of the source document, and to map words of a first sentence of the source document and the corresponding sentence of the translation document in a translation step (see FIGs. 3-4 and paragraphs [0039]-[0046]). The user then draws dependency relationship lines between the boxes containing the words (see FIG. 6 and paragraphs [0048]-[0052]). However, Appleby nowhere discloses simply inputting *a segment* (i.e., the one or more keywords) of the full text sentence in the source language *without inputting a full text sentence in the source language.*

Therefore, Appleby fails to teach "an input step in which the one or more keywords in the source language are input via an input means *without inputting a full text sentence in the source language*, the one or more keywords being a *segment* of the full text sentence in the source language" as recited in claim 1 and "input apparatus for inputting the one or more keywords in the source language *without inputting a full text sentence in the source language*, the one or more keywords being a *segment* of the full text sentence in the source language" as recited in Applicants' independent claims. Unlike both Wakita and Appleby, the present invention simply extracts *a sentence including at least one of the keywords* from a parallel corpus database, which is much simpler and more efficient than Appleby's word-for-word match.

Moreover, because Appleby does not disclose creation of the claimed partial correspondence information of each sentence pair generated in the sentence pair extraction step, and thus, cannot generate the claimed keyword-related phrase table, Appleby's text sentence generation step clearly cannot assume a dependency relationship among keyword-related phrases that are not stored in the claimed keyword-related phrase table.

Accordingly, even if one of ordinary skill in the art were (solely for the sake of argument) properly motivated to turn to Appleby to modify Wakita, the so-modified version of Wakita would not disclose, suggest, or otherwise render obvious the claimed invention.

With respect to the rejection of claims 2 and 9, Fukumochi is not applied to remedy the aforementioned deficiencies of the Wakita-Appleby reference combination. With respect to the rejection of claims 4 and 11, Tolin is not applied to remedy the aforementioned deficiencies of the Wakita-Appleby reference combination. With respect to the rejection of 3, 10, 15 and 18,

Sata is not applied to remedy the aforementioned deficiencies of the Wakita-Appleby-Tolin reference combination.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are respectfully requested.

Additional Cited Reference

Since the remaining patent cited by the Examiner has not been utilized to reject the claims, but rather to merely show the state of the art, no further comments are necessary with respect thereto.

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CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Robert J. Webster, Registration No. 46,472 at (703) 205-8000 in the Washington, D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: MAR 13 2009

Respectfully submitted,

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